

2000
*Nova Scotia Farm Management
Analysis Project*



*Business Management and Economics Section
Nova Scotia Department of Agriculture and Fisheries*

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Nova Scotia Department of Agriculture and Fisheries
Industry Development and Business Services Branch
Business Management and Economics Section
P.O. Box 550
Truro, NS B2N 5E3
Phone: (902)893-6580
Fax: (902)895-9403

NOVA SCOTIA FARM MANAGEMENT ANALYSIS PROJECT

The Nova Scotia Farm Management Analysis Project, or **FMAP**, is designed to assist Nova Scotia farm managers develop their business management knowledge and skills.

FMAP provides farm managers with a farm planning tool from which data is gathered. The compiled data gives a comparative analysis with similar farm businesses as well as a complete financial and production summary of their own business. A year-to-year analysis of business performance improves the farm manager's ability to recognize and react to opportunities resulting from change.

In 2000, 196 individual farm businesses participated in the Farm Management Analysis Project. Participants ranged from smaller part-time businesses to large multi enterprise farms.

At present, the FMAP is available to all Nova Scotia dairy, hog, beef, mink, tree fruit, and blueberry producers.

For further information, contact the Business Management & Economics Office at (902)-893-6580.

Formulas Used To Calculate Financial Analysis

1. Liquidity

Current Ratio = Current Assets ÷ Current Liabilities

- The current ratio measures the business' ability to meet financial obligations as they come due without disrupting normal operations.
- If the ratio is greater than 1, the business is considered to be liquid. A ratio of less than 1 may indicate a potential liquidity problem.

Working Capital = Current Assets - Current Liabilities

- Working capital is the cash available to the business to meet financial obligations as they come due without disrupting normal operations.

2. Solvency

Percent Equity = Owner's Equity ÷ Total Assets x 100%

- Percent Equity is a measure of the owner's equity in the business. It measures the proportion of total assets financed by the owner of the business. A higher percentage indicates lower financial risk.

Debt to Equity = Total Liabilities ÷ Owner's Equity

- The debt to equity ratio is a measure of the extent to which creditors have financed the business compared to the owners. The higher the value of the ratio, the greater the proportion of financing that has been provided by creditors.

3. Profitability

Return on Assets = (Net Income + Interest - Value of Operator and Unpaid Family Labour) ÷ 10 ÷ Average Total Assets for the Period

- Return on assets shows the business' ability to earn a return on its total assets. The higher the value, the greater the return on assets. The value of operator and unpaid family labour reflects the value in the local marketplace for similar work. This was assumed to be \$8/hr.

Return on Equity = (Net Income - Value of Operator and Unpaid Family Labour) ÷ 100 ÷ Average Owner Equity

- Return on equity provides a measure of the return to the owner on his/her investment in the business. The higher the percentage, the greater the return on equity.

Capital Turnover = Revenue ÷ Total Assets

- This ratio indicates the extent to which a business utilizes its assets to generate revenue. A high ratio indicates efficient use of assets.

4. Financial Efficiency

Contribution Margin = Contribution Margin ÷ Revenue x 100%

The contribution margin percentage measures the financial efficiency of the business in terms of funds generated directly from operations. The higher the ratio, the more efficient the business.

Capital Replacement, Personal Exemption & Debt Servicing Margin = Net Income + Interest on Term Debt + Depreciation

This amount represents the dollars generated from operations that are viable to cover capital replacement, withdrawals for personal living expenses, and to make annual payments on all debt.

*Beef
Farm Business
Management
Analysis*



2000 Beef Farm Business Analysis**Income Statement**

	Total	\$ Per Cow
REVENUE		
Calves Sold	\$25,279.09	\$532.09
Finished Cattle Sales	4,611.34	97.06
Breeding Stock	2,232.85	47.00
Other Livestock - Culls	3,402.94	71.63
Custom Work	1,773.57	37.33
Crop Sales	475.62	10.01
Government Assistance	4,830.53	101.68
NISA Income	199.36	4.20
Other Income	5,767.66	121.40
INVENTORY ADJUSTMENT	1,691.21	35.60
TOTAL REVENUE	\$50,264.17	\$1,057.98
OPERATING EXPENSES		
Forages Purchased	\$1,706.64	\$35.92
Grain Purchased	1,283.60	27.02
Salt & Mineral	423.98	8.92
Cropping Expense	4,712.02	99.18
Livestock Purchases	4,875.15	102.61
Vet & Medicine	1,308.87	27.55
Breeding	56.70	1.19
Equipment R&M	7,192.11	151.38
Motor Vehicle	1,184.09	24.92
Building/Fence Repairs	1,591.98	33.51
Custom Work	1,423.45	29.96
Custom Trucking	330.49	6.96
Marketing	189.06	3.98
Hired Labour	3,320.17	69.88
Farm Supplies / Small Tools	786.15	16.55
Legal/Accounting/Office	802.26	16.89
Utilities	819.23	17.24
Short Term Interest	788.38	16.59
Misc.	1,572.66	33.10
TOTAL OPERATING EXPENSES	\$34,367.00	\$723.37
OPERATING MARGIN	\$15,897.17	\$334.61
FIXED EXPENSES		
Insurance	\$1,239.38	\$26.09
Taxes/Rent	1,718.55	36.17
Long Term Interest	2,568.26	54.06
Depreciation: Buildings	2,020.27	42.52
Depreciation: Machinery & eQUIPMENT	7,759.74	163.33
TOTAL FIXED EXPENSES	\$15,306.20	\$322.17
TOTAL EXPENSES	\$49,673.20	\$1,045.54
NET INCOME (LOSS)	\$590.97	\$12.44

Breakeven Analysis

Cattle Crop Sold (Note 1)			
	Weight (Ave. Lbs Live Wt/Hd)	Number (Hd)	Selling Price (\$/lb)
Calves	592	34	1.26
Finished Cattle	1,018	4	1.08
Other Cattle	1,111	6	0.81
Average	706	44	1.14

Inventory Adjustment	Beginning #	Ending #	Change
Calves	16	15	(1)
Finished Cattle	21	6	(14)
Cows	47	48	1
Replacement Heifer	4	5	1
Bulls	2	2	0
Total \$ Value	\$71,969	\$73,660	\$1,691
Return on Cattle Investment (Note 2)		0.8%	

Breakeven Prices:	\$/Lb.
On Total Beef Costs	\$3.20
On Operating Costs	\$2.09

Note 1: Selling Prices are calculated as: $\frac{\text{Livestock Sold} - \$}{\text{Selling wt} - \text{lbs}}$

Note 2: Return on Investment is calculated as: $\frac{\text{Net Income}}{\text{Ending Inventory}}$

Management Analysis

(A) Production Analysis		2000 Average
Calving Percentage	(%)	94.9%
Culling Rate	(%)	7.5%
Lbs Weaned Calf Produced per Cow	(lbs/cow)	566.4

(B) Financial Analysis		2000 Average
Feed Expense Per Lb. Sold	(\$/lb)	\$0.26
Total Revenue Per Weaned Calf	(\$/hd)	\$1,168.42
Total Expenses per Weaned Calf	(\$/hd)	\$1,154.68
Capital Replacement, Personal Exp & Debt Servicing Margin (Note 1)	(\$)	\$12,939.25
Fixed Expenses as a Percent of Total Revenue	(%)	30.5
Variable Expenses as a Percent of Total Revenue	(%)	68.4
All Interest Expenses as % of Total Revenue	(%)	6.7
Contribution Margin % (Note 2)	(%)	31.6

Note 1: Capital Replace., Personal Exp. & Debt Servicing Margin =
Net Income + Long Term Interest + Depreciation

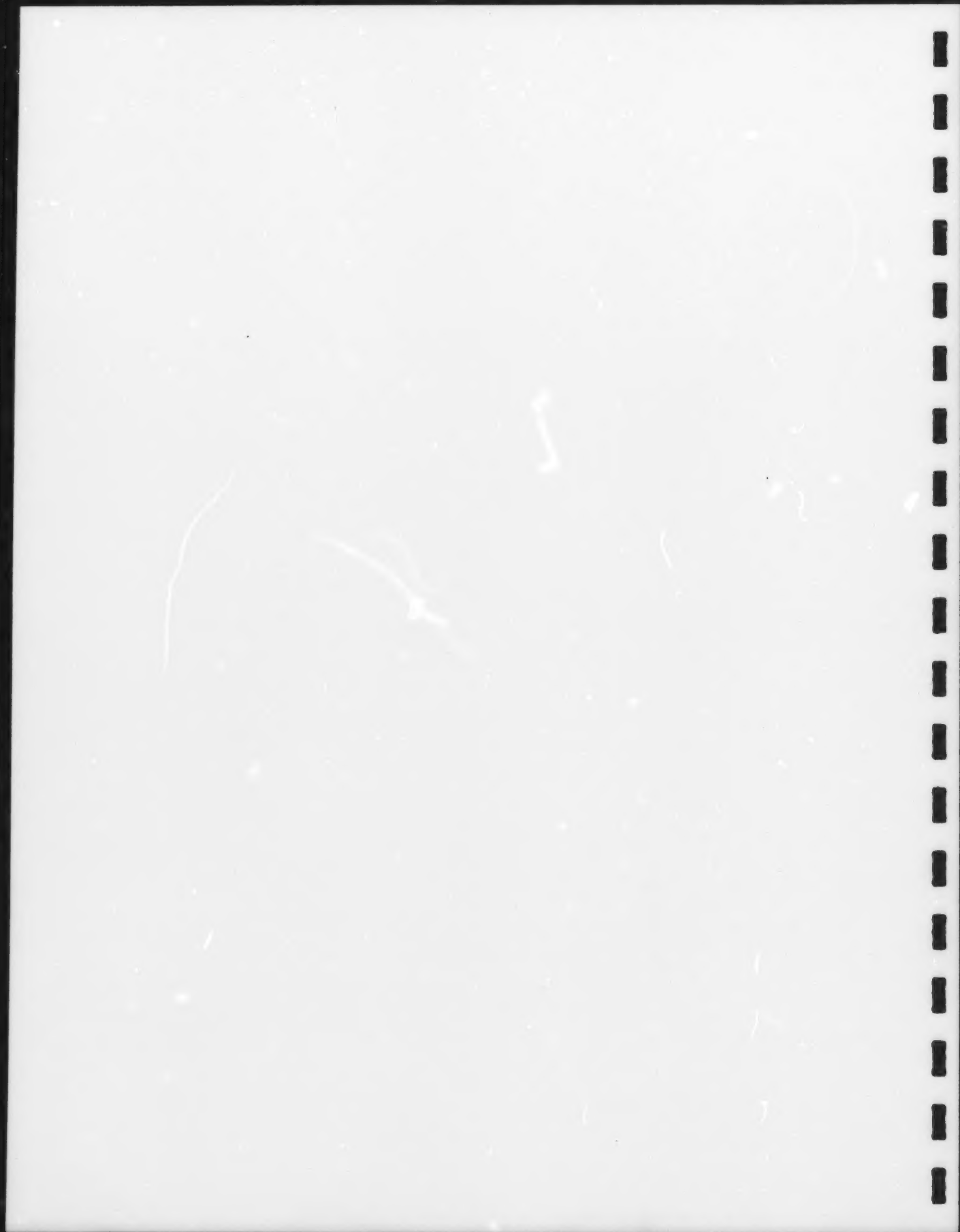
*This amount represents the dollars generated from operations that are available to cover capital replacement, withdrawals for personal living expenses, and to make annual payments on all debt.

Note 2: Contribution Margin % = $\frac{\text{Operating Margin}}{\text{Total Revenue}} \times 100\%$

*This contribution margin percentage measures the financial efficiency of the business in terms of funds generated directly from operations. The higher the ratio, the more efficient the business.



*Blueberry
Farm Business
Management
Analysis*



2000 Blueberry Farm Business Analysis

Statement of Income and Expenses

Average - 12 Farms

Revenue	Total	Per Pound	% of Revenue
Total Blueberry Sales	\$170,440	\$0.611	78.36
Crop Insurance	0	0.000	0.00
Grants & Subsidies	927	0.003	0.43
Custom Work	24,259	0.087	11.15
Other Blueberry Revenue	25,186	0.090	11.58
Other Crop Income	0	0.000	0.00
Revenue from Development	1,433	0.005	0.66
Misc. Non-Blueberry Revenue	20,440	0.073	9.40
Total Non-Blueberry Revenue	21,873	0.080	10.06
Total Farm Revenue	\$217,499	\$0.78	100.00
Plus: Inventory Change	(57)	(0.00)	
Gross Farm Revenue	\$217,442	\$0.78	
Operating Expenses	Total	Per Pound	% of Operating
Berries Purchased for Resale	\$53,524	\$0.192	36.38
Labor Expense	45,524	0.163	30.95
Custom Work Expense	11,647	0.042	7.92
Land Development Expense	721	0.003	0.49
Marketing Expense	1,287	0.005	0.87
Supplies	209	0.001	0.14
Sprays & Chemicals	4,927	0.018	3.35
Fertilizer & Lime	1,158	0.004	0.79
Pollination	1,939	0.007	1.32
Packaging Material & Printing	1,235	0.004	0.84
Fuel - Diesel/Gas/Lube	3,132	0.011	2.13
Tractor & Machinery	7,416	0.027	5.04
Truck & Vehicle	5,746	0.021	3.91
Building Repairs	870	0.003	0.59
Professional Fees	1,430	0.005	0.97
Crop Insurance	38	0.000	0.03
Office Expenses/Fees	1,380	0.005	0.94
Utilities	2,670	0.010	1.82
Interest on Operating	1,290	0.005	0.88
Misc. Blueberry Expense	968	0.003	0.66
Misc. Non-Blueberry Expense	7,201	0.026	4.89
Total Operating Expenses	\$147,112	\$0.53	100.00
<u>Fixed Expenses</u>			
Rentals & Leases	\$2,283	\$0.008	10.26
Insurance	965	0.003	4.34
Property Taxes	585	0.002	2.63
Term Interest	3,427	0.012	15.41
Depreciation - Buildings	494	0.002	2.22
Depreciation - Machinery	10,614	0.038	47.72
Depreciation - Equipment	3,876	0.014	17.42
Total Fixed Expenses	\$22,245	\$0.080	100.00
Net Farm Income (Loss)	\$48,142	\$0.017	

Blueberry

2000 Blueberry Farm Business Analysis

Balance Sheet

	2000	1999
Assets		
Current Assets		
Cash	\$21,679	\$16,535
Blueberry Sales Receivable	0	0
Other Accounts Receivable	10,269	7,010
Inventory (Note 1)	573	631
Other Current Assets	11,455	10,007
Total Current Assets	\$43,977	\$34,182
Capital Assets		
Blueberry Land	\$167,444	\$156,462
Other Land	43,900	41,783
Buildings (Note 2)	12,980	3,658
Machinery (Note 2)	50,457	27,042
Equipment (Note 2)	13,597	5,800
Other Fixed Assets	11,841	5,510
Total Long Term Assets	\$300,218	\$240,254
Total Assets	\$344,195	\$274,436
Liabilities and Owner's Equity		
Current Liabilities	\$29,857	\$24,830
Long Term Liabilities	71,343	47,854
Total Liabilities	\$101,201	\$72,685
Owner's Equity	\$242,994	\$201,752

Total Assets	Per Acre*	2494.47
	Per Pound	1.23
Total Liabilities	Per Acre*	733.43
	Per Pound	0.36
Fixed Expenses	% of Total Cost	13.13
Variable Expenses	% of Total Cost	86.87
* Total Acres of Land in Blueberry Production		

Note 1: Inventory includes fertilizer, sprays and chemicals and other supplies carried over at the end of December.

Note 2: Land is valued at its original cost. All depreciable assets are valued at cost less accumulated depreciation or book values. The book values are taken from the Capital Cost Allowance (CCA) schedules in the income tax returns.

2000 Blueberry Farm Business Analysis

Financial Analysis

Financial Measure	2000
1. Liquidity	
Current Ratio	1.47
Working Capital	14,120
2. Solvency	
Debt to Asset Ratio (%)	20.73
Debt to Equity Ratio	41.65
3. Profitability	
Return on Assets (%)	15.04
Return on Equity (%)	19.38
Gross Margin Ratio (%)	63.86
4. Financial Efficiency	
Interest as % of Revenue (%)	0.02
Capital Replace., Personal Exp. & Debt Servicing Margin (\$)	\$66,553.

2000 Blueberry Farm Business Analysis

Production Management

(A) Production Summary		Totals	
Total Acres		154	
Harvested Acres		661,875	
Total Berries Harvested (Pounds)		278,802	
Pounds of Berries Sold/Acre Harvested		4,212	
(B) Custom Work		\$/Pound	% of Total
Production		0.00	7.74
Harvesting		0.01	33.43
Packing		0.00	0.00
Land Development		0.02	45.60
Land Maintenance		0.01	13.22
(C) Land Development		\$/Pound	% of Total
Custom Work		0.02	88.05
Other Land Development		0.00	11.95
Total Development Expense		0.02	100.00
(D) Labour Analysis			
Lbs. Berries / PE (1)		278,802	
Harvested Acres / PE		66	
Value of Hired Labour		\$45,524	
Per Pound		\$0.16	
Value of Family Labour		\$354	
Per Pound		\$0.00	
Value of Operator Labour		\$4,683	
Per Pound		\$0.02	

(1) One P.E. (Person Equivalent) is equal to 2600 hours of labour per year, i.e. 50 hours per week times 52 weeks per year. One operator is assumed to be equal to one person equivalent

(F) Net Cost of Producing Blueberries		
Total Cash Expenses		\$150,946
Plus: Depreciation		14,984
Inventory Change		(57)
Interest on Equity (1)		13,342
Unpaid Family Labour (2)		354
Operator Labour		4,683
Less: Non-Blueberry Revenue		47,059
Net Cost of Producing Blueberries		\$137,194
Less: Blueberry Sales		170,440
Net Return (Loss)		\$33,247
Net Return Per Pound of Harvested Berries		\$0.12

Notes:

- (1) Interest on equity is assumed to be 6%.
- (2) The hourly wage calculated for hired labour is used to put a value on family labour.
- (3) Non-Blueberry Revenue is the total of other blueberry and non-blueberry revenue.

*Dairy
Farm Business
Management
Analysis*



2000 Dairy Farm Business Analysis

**Income Statement
Average - 74 Farms**

	Total	Per Cow	Per HL
REVENUE			
Milk Sales	\$317,539	\$4,529	\$55.59
Milk Subsidies	6,065	87	1.06
Livestock Sales - Dairy	22,728	324	3.98
Livestock Sales - Other	5,303	76	0.93
Crop Sales	8,585	122	1.50
Grants and Subsidies	10,950	156	1.92
Custom Work	4,855	69	0.85
Miscellaneous	6,156	88	1.08
Miscellaneous (Non Dairy)	16,315	233	2.86
TOTAL REVENUE	\$398,495	\$5,684	\$69.77
Plus: Inventory Change	11,979	171	2.10
GROSS FARM REVENUE	\$410,473	\$5,855	\$71.86
OPERATING EXPENSES			
Feed & Supplements	\$61,577	\$878	\$10.78
Crop Expense	20,037	286	3.51
Livestock Purchases	7,875	112	1.38
Milk Hauling	11,930	170	2.09
Milk Marketing Costs	6,662	95	1.17
Vet and Medicine	6,972	99	1.22
Breeding	4,925	70	0.86
Dairy Supplies & Services	11,256	161	1.97
Truck & Auto Expense	4,691	67	0.82
Tractor & Machinery Repairs	21,180	302	3.71
Building & Fence Repairs	8,966	128	1.57
Operating Interest	4,601	66	0.81
Custom Work	6,115	87	1.07
Hired Labour	37,139	530	6.50
Utilities	7,531	107	1.32
Miscellaneous	7,772	111	1.36
Miscellaneous (Non Dairy)	6,872	98	1.20
TOTAL OPERATING EXPENSES	\$236,100	\$3,368	\$41.33
NET OPERATING INCOME	\$174,374	\$2,487	\$30.53
FIXED EXPENSES			
Rentals & Leases	\$7,286	\$104	\$1.28
Insurance & Taxes	8,607	123	1.51
Interest	39,027	557	6.83
Depreciation	37,025	528	6.48
TOTAL FIXED EXPENSES	\$91,946	\$1,312	\$16.10
NET INCOME (LOSS)	\$82,428	\$1,176	\$14.43

2000 Dairy Farm Business Analysis

Balance Sheet

		2000
CURRENT ASSETS		
Cash		(\$4,788)
Accounts Receivable		9,636
Inventory (Note 1)		
Livestock	137,271	
Crops and Supplies	47,657	184,928
TOTAL CURRENT ASSETS		\$189,776
LONG TERM ASSETS		
Machinery & Equipment (Note 2)		\$116,101
Buildings (Note 2)		104,277
Land (Note 2)		146,365
Milk Quota		411,146
Co-op Dairy Investment		50,920
Other Farm Assets		47,315
TOTAL LONG TERM ASSETS		\$876,125
TOTAL ASSETS		\$1,065,901
LIABILITIES AND OWNERS' EQUITY		
CURRENT LIABILITIES		\$59,106
LONG TERM LIABILITIES		611,651
TOTAL LIABILITIES		\$670,758
OWNERS' EQUITY		\$395,143
TOTAL LIABILITIES AND OWNERS' EQUITY		\$1,065,901
	All Farms	Top 25%
Total Assets		
Per Cow (\$)	\$15,204	\$13,296
Per Kg. of Quota (\$)	\$18,243	\$16,633
Per HL Shipped (\$)	\$187	\$162
Total Liabilities		
Per Cow (\$)	\$9,568	\$6,880
Per Kg. of Quota (\$)	\$11,480	\$8,606
Per HL Shipped (\$)	\$117	\$84
Fixed Expenses as % of Total Cost (%)	28.0	24.9
Variable Expenses as % of Total Cost (%)	72.0	75.1

- (1) Livestock inventory includes all breeding stock, market livestock and animals retained for replacements. Crops and supplies inventory includes all feed, fertilizer and supplies. Inventory values are based on an estimate of Fair Market.
- (2) Land is valued at its original cost. All depreciable assets are valued at cost less accumulated depreciation or book value. The book values are taken from the Capital Cost Allowance (CCA) schedules in the income tax returns.

2000 Dairy Farm Business Analysis

Financial Analysis

Financial Measure		2000
1. Liquidity:		
Current Ratio		3.2
Working Capital	(\$)	130,670
2. Solvency:		
Percent Equity	(%)	37
Debt to Equity Ratio		1.7
3. Profitability		
Return on Assets	(%)	8.9
Return on Equity	(%)	13.6
Capital Turnover	(Times/Yr)	0.4
4. Financial Efficiency		
Interest as % of Revenue	(%)	10
Contribution Margin	(%)	42
Capital Replace., Personal Exp. & Debt		
Servicing Margin	(\$)	158,481

2000 Dairy Farm Business Analysis

Management Analysis

		All Farms	Top 25%
(A) Sales Analysis			
In Quota Milk Price / HL	(\$/HL)	57.63	57.45
OEP Milk Price / HL	(\$/HL)	24.03	23.47
World Milk Price / HL	(\$/HL)	18.31	19.09
Blended Price / HL	(\$/HL)	55.59	54.00
In Quota Milk - % of Total Shipped	(%)	94.1	90.1
OEP Milk - % of Total Shipped	(%)	4.9	8.1
World Milk - % of Total Shipped	(%)	1.0	1.9
Milk Sold per KG Quota Holdings	(\$/KG)	\$5,435	\$5,548
Litres Sold per KG Quota Holdings	(L/KG)	9,776	10,274
(B) Production Analysis			
Average # of Cows	(Hd)		
Milk Sold per Farm	(HL)	70	75
Milk Sold per Cow	(L)	5,712	6,132
		8,147	8,213
Kg. Quota Holdings per Cow	(Kg./Cow)		
Kgs. Of Butterfat produced	(Kg)	0.83	0.80
Kgs. Of Butterfat per Cow	(Kg./Cow)	21,566	23,260
Kgs. Of Protein Produced	(Kg)	308	312
Kgs. Of Protein per Cow	(Kg./Cow)	18,719	19,947
		267	267
Ratio Replacements to Cows	(Replacements/Cows)		
Years Farming	(Yrs.)	0.86	0.87
		20	21
(C) Net Cost of Producing Milk			
Total Cash Expenses	(\$)	291,020	270,994
Depreciation	(\$)	37,025	32,913
Inventory Change	(\$)	(11,979)	(16,241)
Interest on Equity (1)	(\$)	18,855	22,516
Unpaid Family Labour	(\$)	7,602	5,542
Operator Labour (2)	(\$)	23,646	24,792
Less: Sales (Excl. Milk)	(\$)	74,891	79,934
Net Cost of Producing Milk	(\$)	291,278	260,582
Less: Milk Receipts	(\$)	323,603	337,442
Net Return	(\$)	32,325	76,860
Net Cost per HL of Milk	(\$/HL)	50.99	42.49
Net cost per KG of BF	(\$/KG)	13.51	11.20
(D) Expense Analysis			
Feed Expense	(\$)	Per Cow 878 Per HL 10.78	Per Cow 764 Per HL 9.30
Crop Expense	(\$)	286 3.51	311 3.79
Machinery Expense (Excluding Depreciation)	(\$)	302 3.71	276 3.36
Total Feed & Crop Expense	(\$)	1,466 18.00	1,351 16.45
(E) Labour Analysis			
Hired Labour	(PE's)	1.2	1.2
Unpaid Family Labour	(PE's)	0.4	0.3
Number of Operators (3)	(PE's)	1.1	1.2
Total Labour Units	(PE's)	2.7	2.6
Hired Labour Expense	(\$/Hr)	11.97	10.72
Total Hired Labour Expenses	(\$)	37,139	33,358
Cows per PE (3)	(Hd)	26	28
Milk Sold per PE	(HL/PE)	2,130	2,321

1. Interest on equity is assumed to be 5%.

2. A standard figure of \$21,000. for one P.E. per year is used.

3. One P.E. (Person Equivalent) is equal to 2600 hours of labour per year, i.e. 50 hours per week times 52 weeks per year. One operator was assumed to be equal to one person equivalent.

2000 Dairy Farm Business Analysis

Management Factors (By Farm Size)		Farms <50 Cows	Farms 50-80 Cows	Farms >80 Cows
Production Analysis				
Average Number of Cows	(hd)	40	65	138
Milk Sold per Farm	(HL)	3,159	5,329	11,272
Milk Sold per Cow	(L)	7,988	8,262	8,171
Kgs of Butterfat Produced per Farm	(kg)	12,052	20,089	42,376
Kgs of Butterfat Produced per Cow	(kg)	305	311	307
Average Kgs Shipped per Day	(kg/day)	33	55	116
Average Butterfat Test	(%)	3.82	3.76	3.76
Investment Analysis				
Average Investment per Cow				
Current Assets	(\$)	2,638	2,732	2,715
Machinery and Equipment	(\$)	1,779	1,384	1,772
Buildings	(\$)	1,273	1,397	1,640
Land	(\$)	2,503	1,714	2,149
Milk Quota	(\$)	3,925	5,992	6,790
Co-op Dairy Investment	(\$)	876	752	618
Other Farm Assets	(\$)	41	172	1,370
Total Invested Capital Per Cow		13,034	14,145	17,054
Total Liabilities per Cow	(\$)	8,212	8,868	10,856
Owners' Equity per Cow	(\$)	4,822	5,277	6,198
Return on Invested Capital	(%)	6.3	10.4	9.2
Return on Owners' Equity	(%)	5.7	16.6	15.6
Labour Analysis				
Hired Labour	(PE's)	0.7	0.9	2.5
Unpaid Family Labour	(PE's)	0.2	0.2	0.9
Number of Operators	(PE's)	1.1	1.2	1.1
Total Labour Units	(PE's)	2.0	2.4	4.4
Hired Labour Expenses	(\$/hr)	10.59	10.86	13.26
Total Hired Labour Expenses	(\$)	19,425	26,763	87,197
Cows per PE	(hd)	20	27	31
Milk Sold per PE	(HL/PE)	1,567	2,252	2,535

2000 Dairy Farm Business Analysis

Management Factors		2000 Farms	1999 63 Farms	1998 71 Farms	1997 76 Farms
Cows per Farm	(#)	70	60	59	59
Milk Sold per Farm	(HL)	5,712	4,882	4,535	4,462
Milk Sold per Cow	(L)	8,147	8,085	7,752	7,515
Milk Sold per Cow	(\$)	4,529	4,542	4,282	4,166
Purchased Feed per Cow	(\$)	878	863	961	987
Purchased Feed per HL Milk Sold	(\$)	10.78	10.67	12.39	13.13
Crop Expenses per HL Milk Sold	(\$)	3.51	3.80	4.03	4.65
Machinery Expense per HL Milk Sold	(\$)	3.71	3.35	3.24	3.35
Total Feed & Crop Expense per HL	(\$)	18.00	17.81	19.66	21.14
Hired Labour - Person Equivalents	(#)	1.2	0.9	0.9	0.9
Operator & Family Labour - Person Equivalents	(#)	1.5	1.3	1.4	1.5
Milk Sold per Person Equivalent	(HL)	2,130	1,990	2,183	1,865
Cows per Person Equivalent	(#)	26	25	27	25
Total Farm Income	(\$)	410,473	345,495	311,554	290,203
Total Farm Expense	(\$)	328,046	278,506	257,868	242,844
Net Farm Income	(\$)	82,428	66,989	53,687	47,360
Total Farm Income in \$/HL	(\$)	71.86	70.77	68.70	65.04
Total Farm Expense in \$/HL	(\$)	57.43	57.05	56.87	54.42
Net Farm Income in \$/HL	(\$)	14.43	13.72	11.84	10.61
Net Farm Income as % of Sales	(%)	20.08	19.40	17.23	16.3
Variable Cost as % of Total Sales	(%)	57.52	57.10	59.50	61.0
Fixed Cost as % of Total Sales	(%)	22.40	23.50	23.30	22.7
Total Assets	(\$)	1,065,901	852,100	683,710	589,181
Total Liabilities	(\$)	670,738	536,471	444,304	375,429
Total Equity	(\$)	395,143	315,629	239,406	213,752
Equity in Farm Business	(%)	37.0	37.0	36	36.3
Return on Equity	(%)	13.6	11.20	9.0	9.00
Return on Assets	(%)	8.9	8.03	7.6	7.30
Capital Turnover	(YRS)	0.4	0.4	0.4	0.5
Total Assets per HL	(\$/HL)	187	175	151	132
Liabilities per HL	(\$/HL)	117	110	98	84
Operating Expense Ratio	(%)	61	61.0	64	65.2
Total Liabilities/Gross Revenue		1.6	1.6	1.4	1.3
Cost Control (Net Income/Total Expenses)	(%)	20	19.0	17	16.3
Degree of Leverage (Contribution Margin/Fixed Expenses)		1.9	1.80	1.7	1.72
Working Capital	(\$)	130,670	110,562	108,861	109,698
Current Assets/Current Liabilities		3.2	3.4	3.4	5.2
Total Assets/Total Liabilities		1.59	1.6	1.5	1.6
Debt/Equity		1.7	1.7	0.7	1.8

*Swine
Farm Business
Management
Analysis*

Farrow to Finish



2000 Swine Farm Business Analysis - Farrow To Finish

**Income Statement
Average - 21 Farms**

REVENUE	Head Shipped	Total	Per Sow	Percent of Total Revenue
Market Hogs	3,970	\$607,125	\$2,628.25	80.14
Weanlings	570	27,747	120.12	3.66
Gilts - Breeding Stock	130	39,686	171.80	5.24
Boars - Breeding Stock	0	167	0.72	0.02
Cull Sows	86	16,886	73.10	2.23
Cull Boars	3	245	1.06	0.03
Other Hogs	25	3,278	14.19	0.43
TOTAL HOG SALES		695,134	3,009.24	91.76
Risk Management Payments		13,227	57.26	1.75
NISA/AIDA Programs		7,714	33.39	1.02
Other Assistance Programs		1,922	8.32	0.25
Other Income		29,280	126.75	3.87
TOTAL CURRENT INCOME		747,277	3,234.97	98.64
Value of Inventory Change		10,278	44.49	1.36
TOTAL REVENUE		\$757,555	\$3,279.46	100.00
VARIABLE EXPENSES				
Feed Purchased		\$382,267	\$1,654.84	50.46
Swine Purchased		37,878	163.97	5.00
Hired Labour		61,304	265.38	8.09
Bedding		827	3.58	0.11
Vet and Drugs		10,980	47.53	1.45
Hog Supplies		4,348	18.82	0.57
Risk Management Payments		7,641	33.08	1.01
Marketing Costs		6,087	26.35	0.80
Utilities		22,754	98.50	3.00
Truck & Machinery*		14,110	61.08	1.86
Auto Expense		10,339	44.76	1.36
Interest - Operating		5,955	25.78	0.79
Professional Fees		2,288	9.90	0.30
Miscellaneous		9,316	40.33	1.23
Other Non-Hog Expenses		12,955	56.08	1.71
TOTAL VARIABLE EXPENSES		\$589,048	\$2,549.99	77.76
CONTRIBUTION MARGIN		\$168,506	\$729.46	22.24
FIXED EXPENSES				
Leases and Rentals		\$4,101	\$17.75	0.54
Building & Equipment Repairs		17,289	74.84	2.28
Depreciation		35,460	153.51	4.68
Interest - Term Loans		35,685	154.48	4.71
Taxes		4,504	19.50	0.59
Insurance		5,944	25.73	0.78
TOTAL FIXED EXPENSES		\$102,983	\$445.81	13.59
TOTAL EXPENSES		\$692,031	\$2,995.81	91.35
NET FARM INCOME (LOSS)		\$65,524	\$283.65	8.65

* Truck and Machinery includes the hog shipping charges.

2000 Swine Farm Business Analysis - Farrow To Finish

Balance Sheet

ASSETS	Ending	Beginning
Current Assets		
Cash On Hand	\$12,186	\$22,262
Accounts Receivable	16,216	12,130
Inventory		
Production Livestock	151,207	140,734
Feed	14,117	14,212
Other Current Assets	10,323	9,585
TOTAL CURRENT ASSETS	\$204,049	\$198,923
Long Term Assets		
Breeding Livestock	\$65,366	\$65,465
Machinery & Equipment	67,809	59,288
Land & Buildings	323,528	320,142
Other Fixed Assets	73,128	53,373
TOTAL LONG TERM ASSETS	\$529,831	\$498,269
TOTAL ASSETS	\$733,880	\$697,192
TOTAL LIABILITIES AND OWNERS' EQUITY		
Current Liabilities	\$114,362	\$108,469
Long Term Liabilities	425,831	428,078
TOTAL LIABILITIES	\$540,194	\$536,547
Beginning Equity	\$160,645	
+ Net Income	65,524	
- Withdrawal's	(32,482)	
OWNER'S EQUITY	\$193,686	\$160,645
TOTAL LIABILITIES AND OWNERS' EQUITY	\$733,880	\$697,192

Financial Analysis

Financial Measure	Ending	Beginning
1. Liquidity:		
Current Ratio	1.78	1.83
Working Capital	89687	90454
2. Solvency:		
Percent Equity	26.4%	23.0%
Debt/Equity Ratio	2.79	3.34
Assets per Sow	3177	
Debt per Sow	2339	
3. Profitability:		
Return on Assets	11.9%	
Return on Equity	24.6%	
Capital Turnover	0.97	
4. Financial Efficiency		
Interest as % of Revenue	5.5%	
Contribution Margin	22.2%	

2000 Swine Farm Business Analysis - Farrow To Finish

Production Analysis

(A) Cost of Production	Total	Per Sow
Total Farm Expenses	\$692,031	\$2,995.81
Plus: Adj. for Livestock Inventory Change	(10,373)	(44.90)
Less: Non Hog Expenses	12,955	56.08
Cull Sales	17,131	74.16
Hog Purchases	8,147	35.27
Total Costs	\$643,426	\$2,841.47
Total Kgs. of Pork Produced (L.W.)	454,006	
Average Cost of Production (L.W.)	\$1.42	
Average Cost of Production (D.W.)	\$1.82	

(B) Inventory Flow	Boars	Sows	Piglets	Production Stock*
Beginning Inventory	10	232	332	1805
+ Purchases/Births	3	81	5677	163
+ Transfers In		13		4937
+ Transfers Out			4937	13
- Sales	3	86		4696
- Deaths		8	756	228
- Ending Inventory	9	231	316	1916
Discrepancy	0	(0)	(0)	52

(C) Livestock Production Analysis			
Farrowing Unit			
Pigs Born	6,191		
Pigs Born Alive	5,677	Pigs Weaned	4937
Still Births (#)	514	Suckling Mortality (#)	756
Still Births (%)	8.3	Suckling Mortality (%)	13.3
Breeding Herd Performance			
Number of Litters	532	Average # of Boars	9.5
Average Number of Sows	231	Sows per Boar	24.4
Litters per Sow	2.30	Pigs Born per Sow	26.8
Pigs Born Per Litter	11.6	Pigs Born Alive per Sow	24.6
Pigs Born Alive/Litter	10.7	Pigs Weaned per Sow	21.4
Pigs Weaned/Litter	9.3	Sow Mortality	8
Pigs Marketed/Sow	20.9	Sow Cull Rate	37.2
Weaner & Finishing Unit			
Weaner & Feeder Hog Mortality	228	Inventory Discrepancy	
Number	4.7	Number	52
Percent		Percent	1.1

* Production Stock includes Weaners, Feeders and Breeding Stock.

2000 Swine Farm Business Analysis - Farrow To Finish

(D) Feed Usage Analysis			
Sow Ration Fed per Sow & Boar		(kgs)	1,099
Total Kgs. Of Pork Produced (L.W.)		(kgs)	454,006
Total Kgs. Of Feed Consumed			1,433,659
Feed Conversion - Creep, Starter & Grower			2.58
Feed Conversion - Total Feed (L.W.)			3.16
FARROWING UNIT (PER WEANER PIG TRANSFERRED TO FINISHING OR SOLD)			
	Kgs. Per Head	Dollars Per Head	Cost Per Tonne Fed
Creep	3.40	2.12	624.65
Starter	30.65	9.70	316.40
Sow & Boar Feed	53.51	13.24	247.33
Total Feed per Pig Weaned	87.57	25.06	
FINISHING UNIT (PER HOG MARKETED)			
Starter	8.22	2.60	316.40
Grower	153.50	39.87	259.77
Finisher	81.02	20.64	254.79
Total Feed per Finished Hog	242.73	63.12	
TOTAL FEED (FARROW TO FINISH)	330.30	88.17	266.95
(E) RISK MANAGEMENT ANALYSIS			
Market Hog Equivalents Calculation	Hd Shipped	MHE Factor	Market Hog Equivalents
Market Hogs Sold	3,970	1.00	3970
Weaner Pigs Sold	570	0.33	190
Breeding Stock Sales	130	1.20	156
Culls & Other Sales	114	0.75	85
Total Market Hog Equivalents Produced			4402
Calculation of Costs:			
Additional Costs		Total	Per Market Hog Equiv.
Total Farm Expenses		\$692,031	\$157.20
Plus: Adj. For Livestock Inv. Change		(10,373)	(2.36)
Less: Non-Hog Expenses		12,955	2.94
Total Costs		668,703	151.90
Less: Feed Expenses		382,267	86.84
Total "Additional Costs" (Excl. Feed)		\$286,436	\$65.07
Return to Operator Labour:		Total	Man Equiv.
Operator Labour Rate per Person Equiv.		\$35,000	7.95
Operator Labour Person Equivalent		0.98	0.98
Value for Operator Labour Cost		\$34,333	7.80
Feed Cost Calculation:			
Feed Conversion D.W.	(Kgs Feed/Kgs Pork)	3.95	3.95
Average D.W. per Market Hog	(kgs)	84.46	84.46
Total Feed per Market Hog	(kgs)	333.38	333.38
Average Feed Cost per Tonne*		\$269.38	\$269.38
Feed Cost per Market Hog Equivalent *		89.81	\$89.81
Total Costs per Market Hog Equivalent			\$162.67

* Feed Costs are based on feed expense for the entire year. The RMS calculation uses actual costs of feed ingredients as they occur each week.

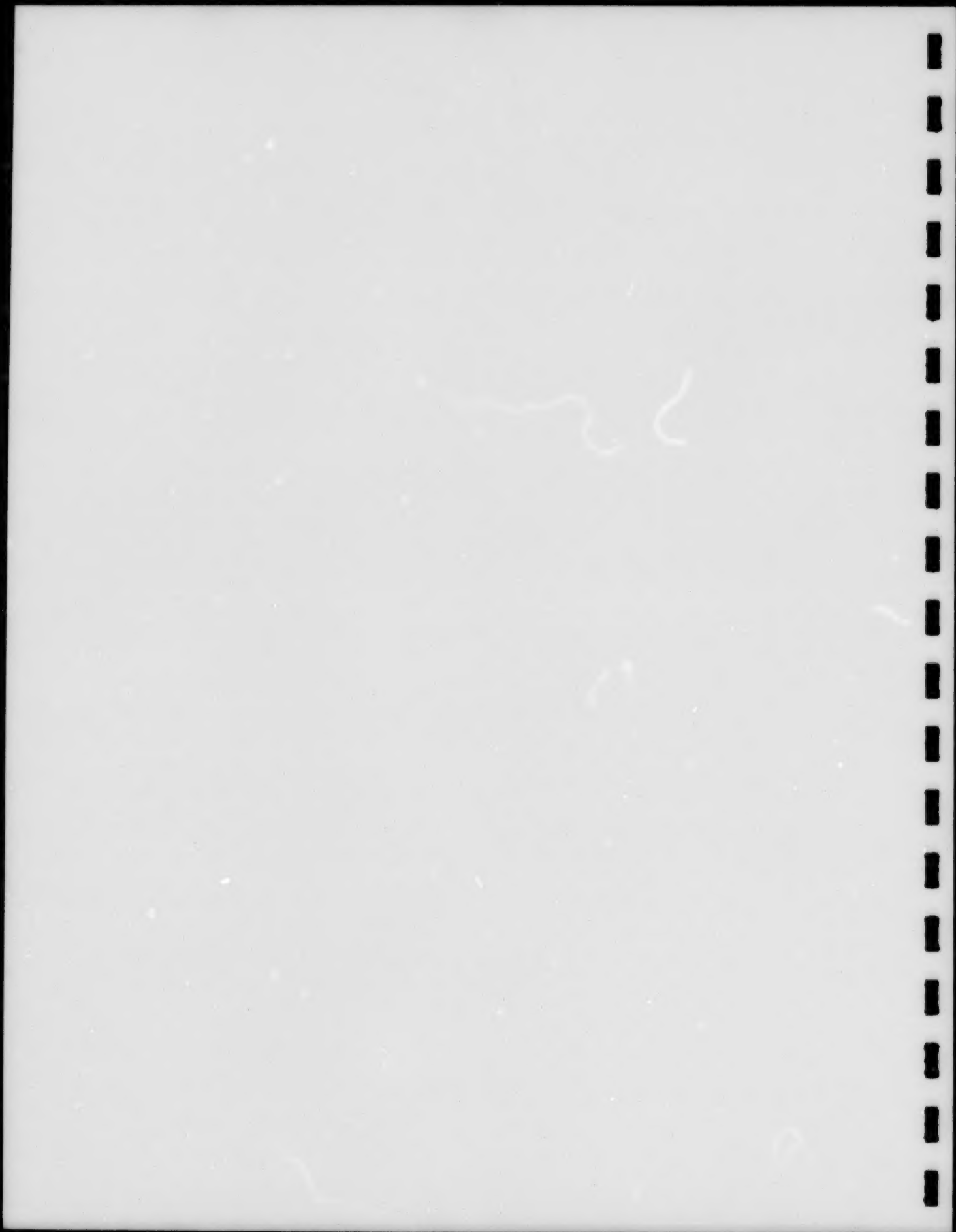
2000 Swine Farm Business Analysis - Farrow To Finish

Management Analysis

(F) Labour		
Labour Person Equivalents	(#)	3.32
Hogs Produced per Person (L.W.)	(Kgs)	136,788
Gross Farm Income per Person	(\$)	228,245
Sows Kept Per Person*	(#)	70
Total Pigs Produced per Person	(#)	1,452
Net Income per Operator	(\$)	66,796

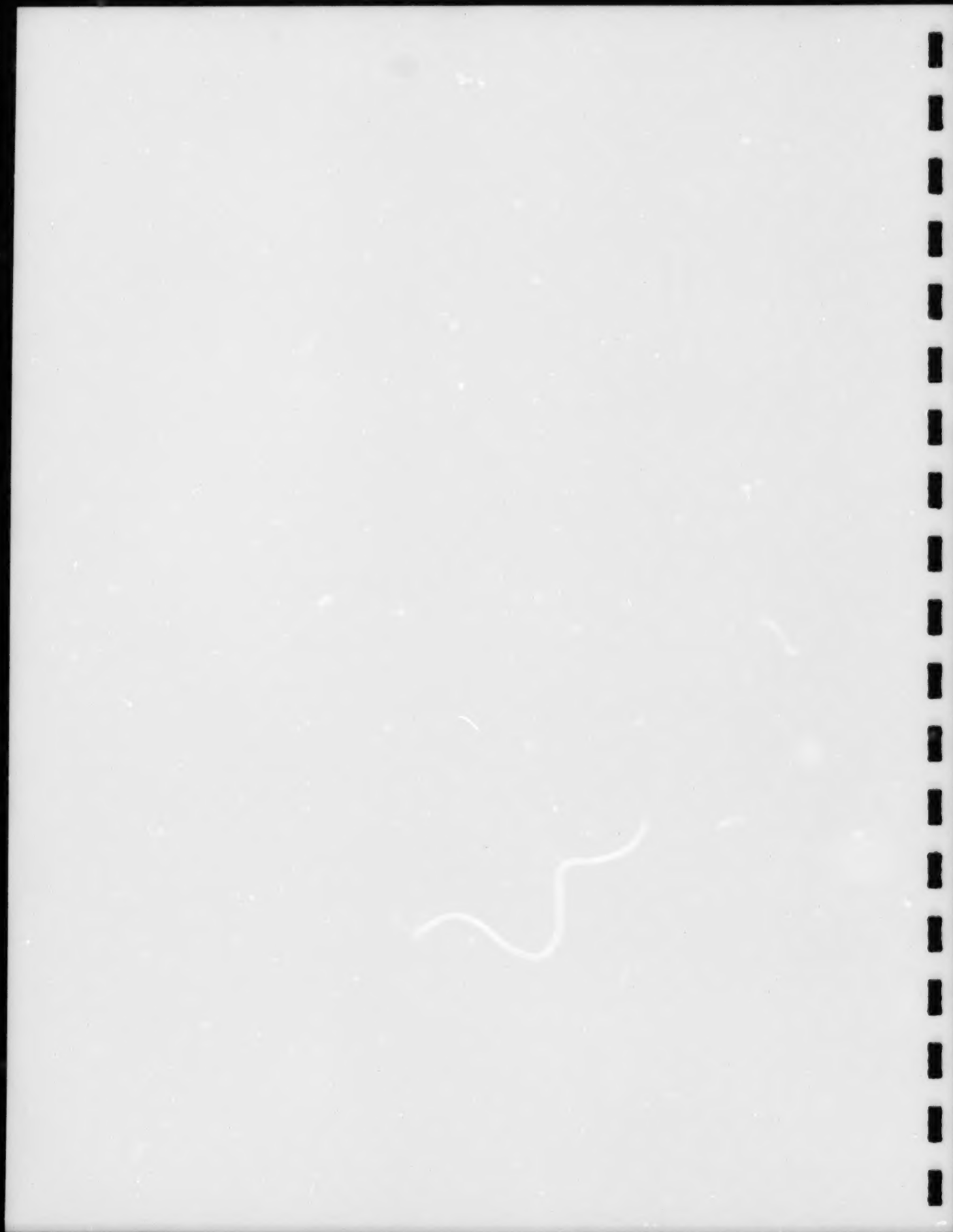
Market Analysis

(G) Market Analysis		
Ave. L.W. of Market Hogs Sold	(Kgs)	105.57
Average D.W. per Market Hog	(Kgs)	84.46
Average Carcass Grade Index		108.4
Average Market Price For Your Operation		\$1.81
Market Return per Hog Marketed		\$152.91
Risk Management Payments		3.33
Total Return per Market Hog		\$156.24
Weaner Price Received	(Per Weaner)	\$48.65
Breeding Stock Sale Prices		
Gilts		\$304.83



*Swine
Farm Business
Management
Analysis*

Finishing



2000 Swine Farm Business Analysis - Finishing

Income Statement
Average - 8 Farms

Revenue	Head Shipped	Total	Per Sow	Percent Of Total Revenue
Market Hogs	3,617	\$557,086	\$149.89	86.2
Other Hogs	100	11,390	3.06	1.8
TOTAL HOG SALES		568,476	152.95	88.0
Risk Management Payments		11,180	3.01	1.7
NISA/AIDA Programs		8,199	2.21	1.3
Other Assistance Programs		0	0.00	0.0
Other Income		16,311	4.39	2.5
TOTAL CURRENT INCOME		604,165	162.55	93.5
Value of Inventory Change		42,052	11.31	6.5
TOTAL REVENUE		\$646,217	\$173.87	100.0
VARIABLE EXPENSES				
Feed Purchased		\$228,965	\$61.60	35.4
Swine Purchased		205,444	55.28	31.8
Hired Labour		21,505	5.79	3.3
Bedding		132	0.04	0.0
Vet and Drugs		2,686	0.72	0.4
Hog Supplies		1,643	0.44	0.3
Marketing Costs		6,349	1.71	1.0
Risk Management Service		6,149	1.65	1.0
Utilities		8,148	2.19	1.3
Machinery Expense		3,202	0.86	0.5
Auto Expense		5,247	1.41	0.8
Professional Fees		1,897	0.51	0.3
Lease & Rental		5,075	1.37	0.8
Interest - Operating		2,355	0.63	0.4
Miscellaneous		1,954	0.53	0.3
Other Non-Hog Expenses		11,910	3.20	1.8
TOTAL VARIABLE EXPENSES		\$512,659	\$137.93	79.3
CONTRIBUTION MARGIN		133,559	35.93	20.7
FIXED EXPENSES				
Building & Equipment Repairs		\$10,806	\$2.91	1.7
Depreciation		33,340	8.97	5.2
Interest - Term Loans		26,051	7.01	4.0
Taxes		2,562	0.69	0.4
Insurance		3,253	0.88	0.5
TOTAL FIXED EXPENSES		\$76,012	\$20.45	11.8
TOTAL EXPENSES		\$588,670	\$158.38	91.1
NET FARM INCOME (LOSS)		\$57,547	\$15.48	8.9

2000 Swine Farm Business Analysis - Finishing

Balance Sheet

Assets	Ending	Beginning
Current Assets		
Cash On Hand	\$1,271	(\$1,016)
Accounts Receivable	16,049	16,523
Inventory		
Livestock	\$134,252	
Feed	24,255	114,787
Other Current Assets	20,360	18,006
TOTAL CURRENT ASSETS	\$196,188	\$148,300
Long Term Assets		
Machinery & Equipment	\$80,743	\$72,594
Land & Buildings	219,246	213,627
Other Fixed Assets	84,218	69,334
TOTAL LONG TERM ASSETS	\$384,208	\$355,556
TOTAL ASSETS	\$580,396	\$503,855
TOTAL LIABILITIES AND OWNERS' EQUITY		
Current Liabilities	103,981	87,020
Long Term Liabilities	341,950	319,897
TOTAL LIABILITIES	\$445,931	\$406,918
Beginning Equity	96,938	
+ Net Income	57,547	
- Withdrawals	(20,020)	
OWNERS' EQUITY	\$134,465	\$96,938
TOTAL LIABILITIES AND OWNERS' EQUITY	\$580,396	\$503,855

2000 Swine Farm Business Analysis - Finishing

Financial Analysis

Financial Measure	Ending	Beginning
1. Liquidity:		
Current Ratio	1.89	1.70
Working Capital	\$92,207	\$61,280
2. Solvency:		
Percent Equity	23.2%	19.2%
Debt/Equity Ratio	3.3	4.2
Debt per Market Hog Equivalent	\$107.78	
3. Profitability:		
Return on Assets*	13.0%	
Return on Equity	36.2%	
Capital Turnover	1.11	
4. Financial Efficiency		
Interest as % of Revenue	4.4%	
Contribution Margin	20.7%	

Production Analysis

(A) Cost Of Production	Total	Per Market Hog
Total Farm Expenses	588,670	148.79
Less: Other Income	11,910	3.01
Plus: Adj. for Inventory Change	(42,052)	(10.63)
Return on Owners' Equity (@5%)	8,209	2.07
Unpaid Operator & Family Labour	15,697	3.97
Total Costs	558,615	141.20
Total Kgs. of Pork Produced (Kgs. L.W.)	360,620	91.2
Average Cost of Production (\$/Kg. D.W.)	\$1.94	\$1.94

(B) Market Analysis		
Ave. D.W. per Market Hog	(Kgs)	84.06
Average Carcass Grade Index	(Kgs)	109.1
Average Market Price for Your Operation	(\$/Kg)	\$1.83
Market Return per Hog Marketed		\$154.01
Risk Management Payments		3.09
Total Return per Market Hog		\$157.10
Average Total Return	(\$/Kg)	\$1.87

2000 Swine Farm Business Analysis - Finishing

(C) Feed Use			
Feed Cost/Kg Produced (L.W.)		(\$/Kg)	\$0.63
Feed Cost/100 Kgs of Gain (D.W.)		(\$/100 Kg)	\$79.05
Feed Cost/100 Kgs of Gain (L.W.)		(\$/100 Kg)	\$63.24
Feed Conversion - Starter & Grower L.W.		(Feed/Gain)	2.62
	Kgs. Per Hog	Dollars Per Hog	Cost Per Tonne Fed
Starter Ration	41	\$12.55	\$304.26
Grower Ration	141	32.41	\$229.55
Finisher Ration	57	12.68	\$224.26
Total Feed	239	\$57.64	

(D) Labour		
Labour Person Equivalents*	(#)	1.4
Operator & Family Labour Equiv.	(#)	0.7
Production per Person (L.W.)	(Kgs)	249,133
Gross Farm Income per Person	(\$)	446,437
Net Income per Operator & Family Labour	(\$)	76,986
Market Hog Equivalents Per Person	(#)	2,733

* One PE (Person Equivalent) is equal to one full time person for one year.

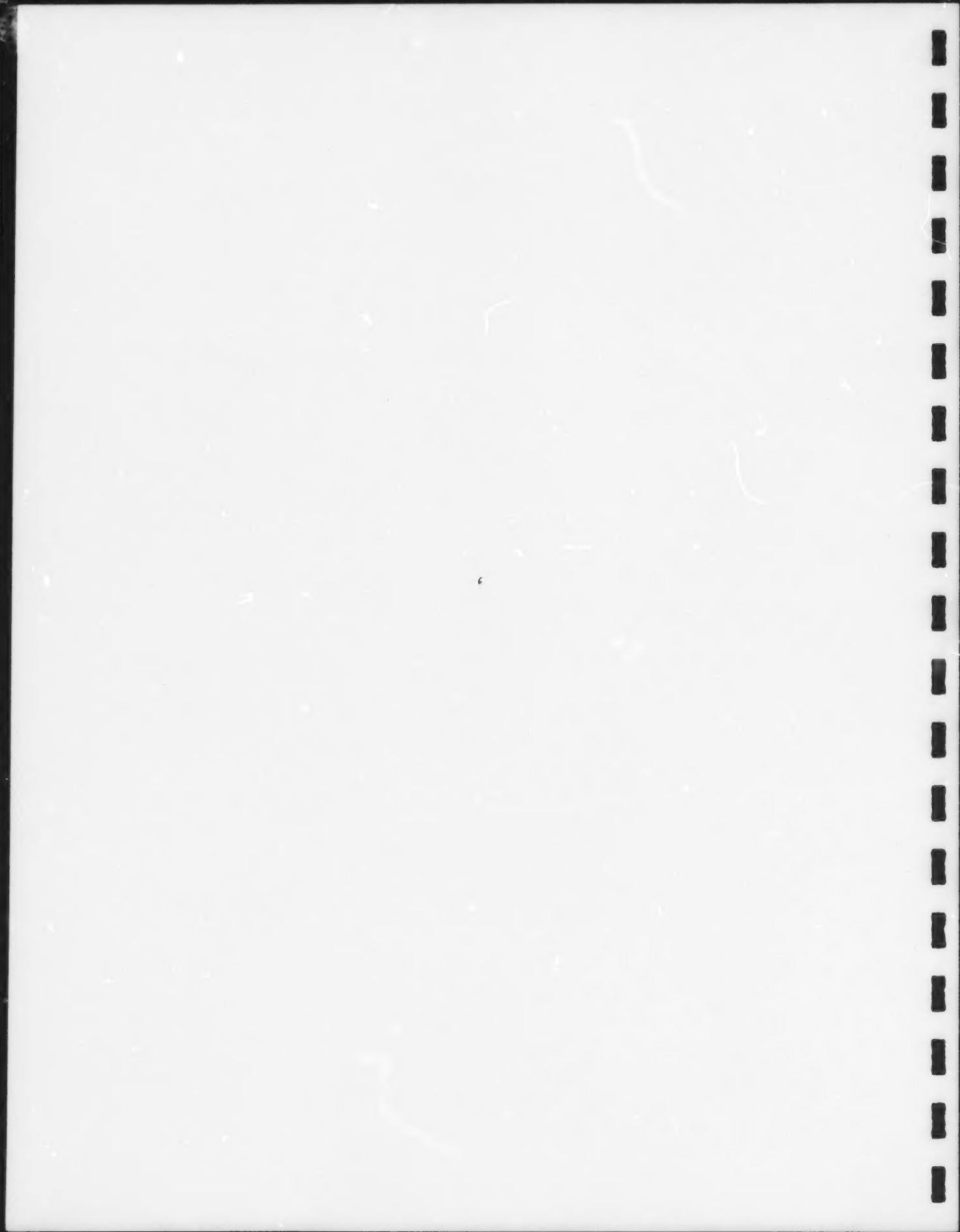
Production Analysis

(E) Inventory			
Purchases of Weaners	(Hd)	4,279	3.04%
Feeder Hog Mortality	(Hd)	120	
Inventory Discrepancy	(Hd)	37	
Market Hog Equivalents*	(Hd)	3,956	
Inventory Change	(Hd)	479	
Market Hogs Sold	(Hd)	3,617	

* Note: Market Hog Equivalents = Market Hogs Sold + Other Hogs Sold
+ (Ending Inventory - Beginning Inventory) ÷ 2

*Swine
Farm Business
Management
Analysis*

Sow-Weanling



2000 Swine Farm Business Analysis - Sow-Weanling

Income Statement
Average - 5 Farms

Revenue	Head Shipped	Total	Per Sow	Per Weaner Produced
Weanlings	4,675	\$226,124	\$766.52	\$48.37
Market Hogs	488	75,855	257.14	16.23
Cull Sows	97	20,232	68.58	4.33
Cull Boars	3	398	1.35	0.09
Other Hogs	0	0	0.00	0.00
TOTAL HOG SALES		\$322,609	\$1,093.59	\$69.01
Risk Management Payments		1,415	4.80	0.30
NISA/AIDA Programs		2,599	8.81	0.56
Other Assistance Programs		2,387	8.09	0.51
Other Income		7,149	24.23	1.53
TOTAL CURRENT INCOME		\$336,159	\$1,139.52	\$71.91
Value of Inventory Change		33,052	112.04	7.07
TOTAL REVENUE		\$369,211	\$1,251.56	\$78.98
VARIABLE EXPENSES				
Feed Purchased		\$141,332	\$479.09	\$30.23
Swine Purchased		47,855	162.22	10.24
Hired Labour		25,445	86.26	5.44
Bedding		2,297	7.79	0.49
Vet and Drugs		16,335	55.37	3.49
Hog Supplies		3,926	13.31	0.84
Marketing Costs		1,965	6.66	0.42
Utilities		14,366	48.70	3.07
Truck & Machinery Expense		2,494	8.45	0.53
Auto Expense		3,451	11.70	0.74
Interest - Operating		5,799	19.66	1.24
Miscellaneous		6,097	20.67	1.30
Other Non-Hog Expenses		62	0.21	0.01
TOTAL VARIABLE EXPENSES		\$271,423	\$920.08	\$58.06
CONTRIBUTION MARGIN		\$97,787	\$219.44	\$13.85
FIXED EXPENSES				
Rental / Lease / Custom Work		\$2,232	\$7.56	\$0.48
Building & Equipment Repairs		9,529	32.30	2.04
Depreciation		36,604	124.08	7.83
Interest - Term Loans		34,775	117.88	7.44
Taxes		2,239	7.59	0.48
Insurance		4,124	13.98	0.88
TOTAL FIXED EXPENSES		\$89,503	\$303.40	\$19.15
TOTAL EXPENSES		\$360,926	\$1,223.48	\$77.21
NET FARM INCOME (LOSS)		\$8,284	\$28.08	\$1.77

2000 Swine Farm Business Analysis - Sow-Weanling

Balance Sheet

Assets	Ending	Beginning
Current Assets		
Cash On Hand	\$4,399	\$1,787
Accounts Receivable	5,810	1,857
Inventory		
Livestock 48,919		
Feed 3,221	52,140	28,822
Other Current Assets	4,020	22,481
TOTAL CURRENT ASSETS	\$66,369	\$54,948
Long Term Assets		
Breeding Livestock	\$98,370	\$88,636
Machinery & Equipment	93,550	85,508
Land & Buildings	307,816	275,124
Other Fixed Assets	34,023	28,453
TOTAL LONG TERM ASSETS	\$533,759	\$477,721
TOTAL ASSETS	\$600,128	\$532,669
TOTAL LIABILITIES AND OWNERS' EQUITY		
Current Liabilities	\$71,823	\$93,791
Long Term Liabilities	\$524,350	\$436,285
TOTAL LIABILITIES	\$596,174	\$530,076
Owners' Equity - Beginning	\$2,593	
+ Net Income	8,234	
- Owners' Net Contributions (Withdrawals)	(6,922)	
OWNERS' EQUITY	\$3,955	\$2,593
TOTAL LIABILITIES AND OWNERS' EQUITY	\$600,128	\$532,669

Financial Analysis

Financial Measure	Ending	Beginning
1. Liquidity:		
Current Ratio	0.92	0.59
Working Capital	—	—
2. Solvency:		
Percent Equity	0.7%	0.5%
Debt/Equity Ratio	150.8	204.5
Assets per Sow	\$1,870	\$1,980
Debt per Sow	\$1,857	\$1,971
3. Profitability:		
Return on Assets*	5.3%	
Return on Equity	—	
Capital Turnover	1.63	
4. Financial Efficiency		
Interest as % of Revenue	11.0%	
Contribution Margin	26.5%	

2000 Swine Farm Business Analysis - Sow-Weanling

Production Analysis

(A) Cost Of Production	Total	Per Sow
Total Farm Expenses	\$360,926	\$1,223.48
Plus: Adj. for Lvstk. Inventory Change	(32,767)	(111.07)
Less: Cull Sales	20,630	69.93
Hog Purchases	0	0.00
Total Costs	\$307,530	\$1,042.47
Total Kgs. of Weaner Produced (Kgs. L.W.)	115,061	390
Average Cost of Production: Per Kilogram	\$2.67	
Per Weaner	\$57.61	

(B) Inventory Flow	Boars	Sows	Piglets	Production Stock*
Beginning Inventory	11	269	197	450
+ Purchases/Births	2	160	6,600	0
+ Transfers In		(0)		5457
+ Transfers Out			5,457	(0)
- Sales	3	97		5163
- Deaths		11	935	106
- Ending Inventory	10	321	404	626
Discrepancy	(0)	0	(0)	13

(C) Livestock Production Analysis			
Farrowing Unit			
Pigs Born	7,087		
Still Births (#)	487.8	Suckling Deaths	935
Still Births (%)	6.9%	Suckling Mortality	14.2%
Pigs Born Alive	6,600	Pigs Weaned	5,457
Breeding Herd Performance			
Number of Litters	631	Average # of Boars	10.4
Average Number of Sows	295	Sows per Boar	28.4
Litters per Sow	2.1	Sow Cull Rate	32.9%
Pigs Born per Litter	11.2	Born per Sow	24.0
Pigs Born Alive per Litter	10.5	Born Alive per Sow	22.4
Pigs Marketed per Sow	18.1	Weaned per Sow	18.5
Weaner & Finishing Unit			
Weaner & Feeder Hog Mortality		Inventory Discrepancy	
Number	106	Number	13
Percent	2.0%	Percent	0.3%

* Production Stock includes Weaners, Feeders and Breeding Stock.

2000 Swine Farm Business Analysis - Sow-Weanling

(D) Livestock Analysis		
Average L.W. per Weanling Sold	(kg)	12.64
Market Return per Weaner	(\$)	48.37

(E) Labour		
Labour Person Equivalents	(#)	1.93
Weaners Produced Per Person	(Kgs)	59,617
Weaners Produced Per Person	(#)	2,766
Sows Kept Per Person*	(#)	153
Gross Farm Income Per Person	(\$)	191,301

* One PE (Person Equivalent) is equal to one full time person for one year.

(F) Feed Analysis			
Farrowing Unit (Per Weaner Pig Transferred to Finishing or Sold)			
	Kgs	Dollars	Per Tonne
Creep Feed	1.25	\$1.08	\$864.00
Starter	12.07	4.08	\$338.03
Sow & Boar Feed	61.58	14.09	\$228.81
Total Feed per Weaner	74.90	\$19.25	
Feed per Sow & Boar	1076.00	\$246.20	

*Mink
Farm Business
Management
Analysis*



2000 Mink Farm Business Analysis

Income Statement

	Total	Per Breeding Female*	Per Mink Produced**
REVENUE			
Pelt Sales (Note 1)	\$655,491	\$193.74	\$54.37
Breeding Stock	30,090	8.89	2.50
Other Mink Sold	0	0.00	0.00
Feed Sales	22,849	6.75	1.90
Subsidies	12,795	3.78	1.06
Miscellaneous	9,673	2.86	0.80
Adjustment for Inventory Change	17,739	5.24	1.47
TOTAL REVENUE	\$748,637	\$221.27	\$62.10
VARIABLE COSTS			
Breeding Stock Purchases	\$49,730	\$14.70	\$4.13
Other Mink Purchased	650	0.19	0.05
Feed & Supplements	181,569	53.67	15.06
Vet & Medicine	10,037	2.97	0.83
Supplies	16,830	4.97	1.40
Marketing	38,861	11.49	3.22
On-Farm Pelting	406	0.12	0.03
Custom Pelting	55,903	16.52	4.64
Hired Labour (Non-Pelting)	136,768	40.42	11.34
Truck & Machinery - Fuel & Repairs	24,252	7.17	2.01
Building Repairs	11,938	3.53	0.99
Utilities	7,655	2.26	0.63
Interest on Operating Loans	12,159	3.59	1.01
Other Cash Operating Costs	5,945	1.76	0.49
TOTAL VARIABLE COSTS	\$552,702	\$163.36	\$45.85
CONTRIBUTION MARGIN (Note 2)	\$195,935	\$57.91	\$16.25
FIXED COSTS			
Term Leases & Rentals	0	0.00	0.00
Insurance & Taxes	7,555	2.23	0.63
Interest on Long-Term Debt	10,992	3.25	0.91
Depreciation	28,374	8.39	2.35
TOTAL FIXED COSTS	\$46,921	\$13.87	\$3.89
TOTAL COSTS	\$599,623	\$177.23	\$49.74
NET INCOME (LOSS) (Note 3)	\$149,014	\$44.04	\$12.36

* Number of females is determined by averaging the beginning and ending number of females.

** The number of mink produced equals total pelt sales + breeding stock sales + other mink sales + ending inventory of breeding stock and pelt carry over - beginning inventory of breeding stock and pelt carry over.

Note 1: All US dollars were converted into Canadian dollars using the actual exchange that the producer received at the time of payment.

Note 2: Contribution Margin: Total farm cash revenues less total farm variable costs. This is the amount available to cover fixed costs and profit.

Note 3: Net Income = Return to operator and unpaid family labour, management and equity capital.

Balance Sheet

ASSETS		
	1999	2000
CURRENT ASSETS		
Cash	\$17,915	\$50,153
Accounts Receivable (Note 1)	325,398	398,923
Inventory (Note 2)		
Mink, Pelts 35,459		
Feed <u>1,178</u>	55,489	36,637
Other Current Assets	10,866	49,211
TOTAL CURRENT ASSETS	\$409,668	\$534,923
LONG TERM ASSETS		
Breeding Stock	\$244,842	\$230,118
Machinery & Equipment (Note 3)	79,505	71,646
Land, Buildings, and Pens (Note 3)	134,650	159,619
Other Fixed Assets	42,077	57,127
TOTAL LONG TERM ASSETS	\$501,074	\$518,511
TOTAL ASSETS	\$910,742	\$1,053,434
LIABILITIES AND OWNERS' EQUITY		
CURRENT LIABILITIES (Note 4)	\$161,731	\$174,308
LONG TERM LIABILITIES	107,023	150,290
TOTAL LIABILITIES	\$268,753	\$324,598
OWNERS' EQUITY	\$641,989	\$728,836
TOTAL LIABILITIES AND OWNERS' EQUITY	\$910,742	\$1,053,434

Notes:

- Note 1:** For purposes of this study, current income and expenses are recorded on an accrual basis. The pelts which were produced in the current year are sold at the sale the following year. These pelts appear as income in the current year and as accounts receivable at the fiscal year end. When payment is received for the pelts, it is debited to the cash account with a corresponding reduction in accounts receivable.
- Note 2:** Livestock inventory includes all pelts that were carried over from the previous year. Crops and supplies inventory includes all feed, and supplies on hand at year-end. Inventory values are based on Fair Market Value at fiscal year end.
- Note 3:** All depreciable assets are valued at "cost less accumulated depreciation", or book. Land is valued at its original cost or acreage x \$200. per acre.
- Note 4:** Current Liabilities include all debts that are due within one year, including the current portion of long term debt.

Financial Analysis

Financial Measure	1999	2000
1. Liquidity:		
Current Ratio	2.53	3.07
Working Capital (\$)	247,938	360,615
2. Solvency:		
Percent Equity (%)	70.5	69.2
Debt to Equity Ratio	0.42	0.45
3. Profitability:		
Return on Assets (%)	21.4	15.9
Return on Equity (%)	27.8	19.5
Capital Turnover (Yrs)	1.32	1.41
4. Financial Efficiency:		
Interest as % of Revenue (%)	2.95	3.09
Contribution Margin Ratio	0.33	0.26
Disposable Income (\$)	185,087	170,641
5. Miscellaneous Financial Analysis:		
Total Assets (\$ per breeder female)	249.67	311.36
Total Liabilities (\$ per breeder female)	73.68	95.94

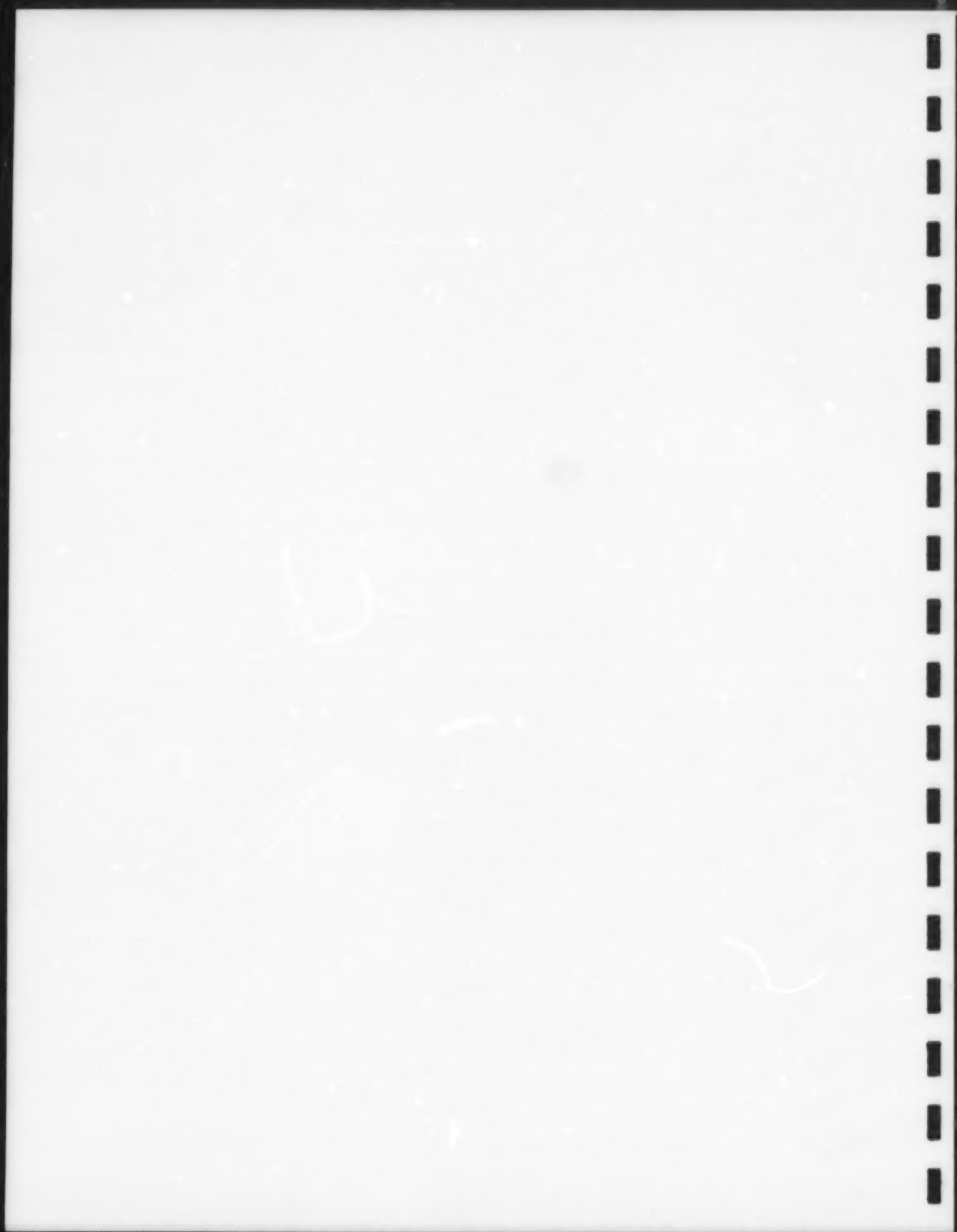
2000 Mink Farm Business Analysis

Management Analysis

Livestock Production					
Pelts Sold	(#)	12,160	Pelts Produced per Female	(pl/hd)	3.6
Breeding Stock Sold	(hd)	586	Breeder Females Housed	(hd)	3,383
Other Mink Sold	(hd)	0	Breeder Males Housed	(hd)	579
Number of Pelt Sales per Breeder Female	(pl/hd)	3.6	Females per Male	(hd)	5.8
			Total Mink (Mature) Produced	(hd)	12,056
Labour Analysis					
Hired Labour Units (2)	(PE's)	4.6	Hired Labour Expense	(\$)	137,174
Unpaid Family Labour Units	(PE's)	0.0	Hired Labour Wage Rate	(\$/hr)	11.51
Number of Operators (3)	(PE's)	1.0	Pelting Labour Expense	(\$)	406
Total Labour Units	(PE's)	5.6	Breeder Females Per Person Equivalent	(hd)	607
Milk Produced per Person	(hd)	2,163			
Analysis of Sales					
Average Price Of:		Pelt Size As A Percentage of Total Pelts			
Dark Male Pelts	(\$)	60.98		Male	Female
Dark Female Pelts	(\$)	48.12	(0/1)	46.3	3.3
All Dark Pelts	(\$)	54.94	2	6.3	13.1
Mutations	(\$)	49.50	3	0.6	24.1
Breeder Pelts	(\$)	51.60	4	0.1	5.9
			5	0.3	0.5
			Total	53.6	47.0
Pelt Quality				Male	Female
Male Pelts	(%)	50.9	Select Maj/Biglarna	43.5	43.8
Female Pelts	(%)	47.0	Maajestic/Glarna	11.7	11.2
Breeder Pelts	(%)	2.2	Mutations	21.3	24.9
Total	(%)	100.0	Standard/Low Grade	23.5	20.1
			Total	100.0	100.0
Net Cost of Production		Per Farm	Per Female	Per Mink Produced	
Total Cash Expenses		\$571,249	\$168.84	\$47.38	
Plus: Depreciation		28,374	8.39	2.35	
Inventory Change (Feed, Supplies)		0	0.00	0.00	
Interest on Average Equity @ 6.0%		39,600	11.70	3.28	
Unpaid Family Labour		338	0.10	0.03	
Operator Labour		20,280	5.99	1.68	
Less: Other Income		32,522	9.61	2.70	
Net Cost of Producing Mink		\$627,319	\$185.41	\$52.04	

- (1) The number of breeder males and the number of breeder females is determined by averaging the beginning and ending number of males or females kept for breeding.
- (2) One P.E. or person equivalent is equal to 2600 hours of labour per year.
- (3) One operator is equal to one person equivalent (1.0 P.E.).

*Tree Fruit
Farm Business
Management
Analysis*



2000 Tree Fruit Farm Business Analysis

**Income Statement
Average - 11 Farms**

	# Bushels	Total \$'s	\$/Total Bus.	% of Total
Fresh Apple Sales	15,666	\$90,757	3.24	51.34
U-Pick Apple Sales	203	1,872	0.07	1.06
Processed Apples	5,459	27,557	0.98	15.59
Juice/Cider Apples	6,719	12,986	0.46	7.35
Total Apples Sales	28,047	\$133,172	\$4.75	75.33%
Crop Insurance Income		0	0.00	0.00
Apple Assistance Programs		2,783	0.10	1.57
Other Gov't Assistance Programs		19,777	0.71	11.19
Misc. Apple Income		1,212	0.04	0.69
Other Apple Revenue		\$23,773	\$0.85	13.45%
Other Tree Fruits		6,159	0.22	3.48
Other Crops		6,043	0.22	3.42
Miscellaneous Income		7,641	0.27	4.32
Total Non-Apple Revenue		\$19,843	\$0.71	11.22%
Total Farm Revenue		\$176,788	\$6.30	100.00%

Statement of Expenses

	Total \$'s	\$'s Per Bushel	% of Total
Harvesting Labour	\$30,319	\$1.08	15.90
Other Labour	36,898	1.32	19.35
Spray: Herbicides	1,770	0.06	0.93
Insecticides	7,803	0.28	4.09
Fungicides	12,439	0.44	6.52
Other	2,808	0.10	1.47
Fertilizers & Lime	4,869	0.17	2.55
Containers & Bins	2,635	0.09	1.38
Rootstalk & Trees	1,601	0.06	0.84
New Orchard Expense	2199	0.08	1.15
Bee Rental	268	0.01	0.14
Other Orchard Expenses	2,177	0.08	1.14
Fuel & Lubricants	4,209	0.15	2.21
Tractor & Machinery Repair	9,781	0.35	5.13
Truck & Vehicle Expense	3,713	0.13	1.95
Building & Bin Repair	2,860	0.10	1.50
Custom Work & Trucking	8,822	0.31	4.63
Specialized Services	1,511	0.05	0.79
Rental Expense	5,947	0.21	3.12
Office Expense	738	0.03	0.39
Insurance	2,952	0.11	1.55
Utilities	3,480	0.12	1.82
Crop Insurance	2,740	0.10	1.44
Fees & Licenses	952	0.03	0.50
Property Taxes	1,052	0.04	0.55
Interest Expense: Operating	2,320	0.08	1.22
Interest Expense: Term	7,350	0.26	3.85
Miscellaneous Expense	5,251	0.19	2.75
Total Apple Related Expenses	\$169,464	\$6.04	88.86%
Other Tree Fruits Expense	\$1,515	\$0.05	0.79
Other Crops Expense	3,088	0.11	1.62
Miscellaneous Non-Apple	2,258	0.08	1.18
Total Non-Apple Expense	\$6,860	\$0.24	3.60%
Total Cash Expenses	\$176,325	\$6.29	92.46%
Building Depreciation	\$1,463	\$0.05	0.77
Machinery & Equipment Depreciation	12,917	0.46	6.77
Total Depreciation	\$14,380	\$0.51	7.54%
Total Farm Expenses	\$190,704	\$6.80	100.00%

Income Summary

	Total \$'s	\$'s Per Bushel
Total Farm Revenue	\$176,787.73	6.30
Total Cash Expenses	\$176,324.82	6.29
Net Cash Income	\$462.91	\$0.02
Plus: Inventory Change, Supplies	\$(154.55)	(0.01)
Less: Depreciation Expense	14,379.64	0.51
Net Farm Income	(\$14,071.27)	(\$0.50)
1. Less: Cost for Unpaid Family Labour	\$211.19	0.01
Less: Interest on Equity @ 6%	7,097.11	0.25
2. Labour and Management Income	(\$21,379.58)	(\$0.76)
1. Unpaid family labour is charged at the farm rates for harvesting and other labour. Management labour was charged at \$12 per hour.		
2. Labour and Management Income represents the amount of income left the operator for his labour and management skills.		

2000 Tree Fruit Farm Business Analysis

Net Cost of Production

Item	Total \$'s	\$'s Per Bushel
Total Cash Expenses	\$176,325	\$6.29
Plus: Other Apple Expenses: Depreciation	\$14,380	\$0.51
1. Inventory Change (supplies)	(155)	(0.01)
Interest on Equity	7,097	0.25
Unpaid Family Labour	211	0.01
2. Operator Labour	18,858	0.67
Total Expenses	\$216,716	\$7.73
Less: Non-Apple Income	\$43,616	\$1.56
Net Cost of Producing Apples	\$173,100	\$6.17
Net Return From Apples		
3. Total Apple Income	\$133,172	\$4.75
Less: Net Cost of Producing Apples	\$173,100	\$6.17
Net Return From Apples	(\$39,928)	(\$1.42)
Total Bushels of Apples Sold	28,047	1
Total Pounds of Apples Sold	1,177,965	42
1. Ending supplies inventory less beginning supplies inventory.		
2. Operator labour was charged at \$12/hr. for management labour and \$8/hr. for other labour.		
3. Crop Insurance proceeds are included as Apple Income.		

2000 Tree Fruit Farm Business Analysis

Balance Sheet at Book Values

	Beginning \$'s	Ending \$'s
Current Assets		
Cash	(\$9,912)	(\$8,180)
Apple Sales Receivable	34,248	46,237
Supplies	3,575	3,420
Other Current Assets	7,054	4,843
Total Current Assets	\$34,965	\$46,321
Term Assets		
Orchard Land	\$65,548	\$65,548
Other Land	56,171	57,035
Farm Buildings	23,865	22,071
Machinery & Equipment	68,069	67,309
Other Term Assets	28,903	37,948
Total Term Assets	\$242,556	\$249,911
TOTAL FARM ASSETS	\$277,520	\$296,231
Liabilities		
Current Liabilities	\$37,189	\$39,065
Term Liabilities	132,699	128,229
Total Liabilities	\$169,888	\$167,294
Owners' Equity	\$107,633	\$128,938

Financial Analysis

		2000
1.	Liquidity:	
	Current Ratio	1.19
	Working Capital	\$ 7,255
2.	Solvency:	
	Percent Equity	% 43.5
	Debt to Equity Ratio	1.30
3.	Profitability:	
	Return on Assets	% 0.0
	Return on Equity	% 0.0
	Capital Turnover	Years 1.62
4.	Financial Efficiency:	
	Interest as of % of Revenue	% 5.47
	Disposable Income	\$ 7,813

Land Use Report

	Acres
Orchard in Apples	70.95
Orchard in Pears	0.89
Orchard in Other Fruit	0.44
Total Orchard	72.28
Cropland and Pasture	51.86
Woodland and Other	250.64
Total Land	374.78
Orchard in Apples, Bearing	59.74
Orchard in Apples, Total	70.95
% of Apple Acreage Bearing	84.20%
Total Number of Trees	15,042
Total Number of Bearing Trees	10,804
Average Density on all Trees	Trees/Acre 212.00
Average Density on Bearing Trees	Trees/Acre 180.83
Average Age of Trees	Years 12.19

Apple Yields	Bushel/B. Acre	Bushel/Tree
Fresh Apples	265.62	1.47
Processing Apples	91.37	0.51
Cider/Juice Apples	112.47	0.62
Total	469.46	2.60

2000 Tree Fruit Farm Business Analysis

Production & Management Information

Sales Information - Total Apple Sales by Variety*

Variety	Average \$ Received Per Bushel
MacIntosh	4.70
Cortland	5.82
Ida Red	5.09
Gravenstein	6.84
Red Delicious	8.84
Cox Orange	9.54
All Varieties	4.75

* Includes Fresh Sales, U-Pick and Processing.

Yield by Variety

Variety	Bushels Produced	Bushels Per Acre
MacIntosh	10,738	509
Cortland	4,140	532
Ida Red	3,591	541
Gravenstein	1,149	327
Red Delicious	1,593	484
Northern Spy	2,810	403